

# Tanja VidakoviÄ-Koch

## List of Publications by Year in descending order

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57  
papers

1,601  
citations

361296

20  
h-index

315616

38  
g-index

60  
all docs

60  
docs citations

60  
times ranked

1824  
citing authors

#	ARTICLE	IF	CITATIONS
1	Advances in the HCl gas-phase electrolysis employing an oxygen-depolarized cathode. <i>Electrochimica Acta</i> , 2021, 365, 137282.	2.6	6
2	Light-Powered Reactivation of Flagella and Contraction of Microtubule Networks: Toward Building an Artificial Cell. <i>ACS Synthetic Biology</i> , 2021, 10, 1490-1504.	1.9	9
3	Scale up of Transmembrane NADH Oxidation in Synthetic Giant Vesicles. <i>Bioconjugate Chemistry</i> , 2021, 32, 897-903.	1.8	3
4	Bottom-Up Synthesis of Artificial Cells: Recent Highlights and Future Challenges. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2021, 12, 287-308.	3.3	28
5	En route to dynamic life processes by SNARE-mediated fusion of polymer and hybrid membranes. <i>Nature Communications</i> , 2021, 12, 4972.	5.8	21
6	Decoupling oxygen and water transport dynamics in polymer electrolyte membrane fuel cells through frequency response methods based on partial pressure perturbations. <i>Electrochimica Acta</i> , 2021, 390, 138788.	2.6	9
7	Directed Signaling Cascades in Monodisperse Artificial Eukaryotic Cells. <i>ACS Nano</i> , 2021, 15, 15656-15666.	7.3	27
8	Nonlinear frequency response analysis: a recent review and perspectives. <i>Current Opinion in Electrochemistry</i> , 2021, 30, 100851.	2.5	12
9	Computational Optimization of Porous Structures for Electrochemical Processes. <i>Processes</i> , 2020, 8, 1205.	1.3	7
10	Polymer Electrolyte Fuel Cell Degradation Mechanisms and Their Diagnosis by Frequency Response Analysis Methods: A Review. <i>Energies</i> , 2020, 13, 5825.	1.6	43
11	Multistimuli Sensing Adhesion Unit for the Self-Positioning of Minimal Synthetic Cells. <i>Small</i> , 2020, 16, 2002440.	5.2	5
12	Precise determination of LJ parameters and Eucken correction factors for a more accurate modeling of transport properties in gases. <i>Heat and Mass Transfer</i> , 2020, 56, 2515-2527.	1.2	2
13	Evaluation of Electrochemical Process Improvement Using the Computer-Aided Nonlinear Frequency Response Method: Oxygen Reduction Reaction in Alkaline Media. <i>Frontiers in Chemistry</i> , 2020, 8, 579869.	1.8	5
14	Computer-Aided Nonlinear Frequency Response Method for Investigating the Dynamics of Chemical Engineering Systems. <i>Processes</i> , 2020, 8, 1354.	1.3	11
15	Rapid Multi-Objective Optimization of Periodically Operated Processes Based on the Computer-Aided Nonlinear Frequency Response Method. <i>Processes</i> , 2020, 8, 1357.	1.3	7
16	Model-Based Analysis of the Limiting Mechanisms in the Gas-Phase Oxidation of HCl Employing an Oxygen Depolarized Cathode. <i>Journal of the Electrochemical Society</i> , 2020, 167, 013537.	1.3	2
17	Editorial on Special Issue Electrolysis Processes. <i>Processes</i> , 2020, 8, 578.	1.3	3
18	Light-Driven ATP Regeneration in Diblock/Grafted Hybrid Vesicles. <i>ChemBioChem</i> , 2020, 21, 2149-2160.	1.3	32

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19	Selectivity and Sustainability of Electroenzymatic Process for Glucose Conversion to Gluconic Acid. Catalysts, 2020, 10, 269.	1.6	8
20	Constructing artificial respiratory chain in polymer compartments: Insights into the interplay between cytochrome c oxidase and the membrane. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15006-15017.	3.3	37
21	Steady-State Water Drainage by Oxygen in Anodic Porous Transport Layer of Electrolyzers: A 2D Pore Network Study. Processes, 2020, 8, 362.	1.3	20
22	Interplay Between Mitophagy and Apoptosis Defines a Cell Fate Upon Co-treatment of Breast Cancer Cells With a Recombinant Fragment of Human $\beta$ -Casein and Tumor Necrosis Factor-Related Apoptosis-Inducing Ligand. Frontiers in Cell and Developmental Biology, 2020, 8, 617762.	1.8	5
23	Oxygen reduction reaction on silver electrodes under strong alkaline conditions. Electrochimica Acta, 2019, 320, 134517.	2.6	13
24	Pore Network Simulation of Gas-Liquid Distribution in Porous Transport Layers. Processes, 2019, 7, 558.	1.3	13
25	Electrochemical gas phase oxidation of hydrogen chloride to chlorine: Model-based analysis of transport and reaction mechanisms. Electrochimica Acta, 2019, 324, 134780.	2.6	4
26	Energy-Efficient Gas-Phase Electrolysis of Hydrogen Chloride. Chemie-Ingenieur-Technik, 2019, 91, 795-808.	0.4	10
27	Artificial Organelles for Energy Regeneration. Advanced Biology, 2019, 3, e1800323.	3.0	31
28	Studying mass transport dynamics in polymer electrolyte membrane fuel cells using concentration-alternating frequency response analysis. Journal of Power Sources, 2019, 412, 331-335.	4.0	15
29	A Guide to Concentration Alternating Frequency Response Analysis of Fuel Cells. Journal of Visualized Experiments, 2019, , .	0.2	0
30	Effect of the MEA design on the performance of PEMWE single cells with different sizes. Journal of Applied Electrochemistry, 2018, 48, 701-711.	1.5	29
31	Novel process for the exergetically efficient recycling of chlorine by gas phase electrolysis of hydrogen chloride. Chemical Engineering Journal, 2018, 346, 535-548.	6.6	17
32	Ultra-low loading Pt-sputtered gas diffusion electrodes for oxygen reduction reaction. Journal of Applied Electrochemistry, 2018, 48, 221-232.	1.5	21
33	Transmembrane NADH Oxidation with Tetracyanoquinodimethane. Langmuir, 2018, 34, 5435-5443.	1.6	12
34	Sequential bottom-up assembly of mechanically stabilized synthetic cells by microfluidics. Nature Materials, 2018, 17, 89-96.	13.3	314
35	Porous Electrodes in Bioelectrochemistry. , 2018, , 392-401.		1
36	MaxSynBio: Avenues Towards Creating Cells from the Bottom Up. Angewandte Chemie - International Edition, 2018, 57, 13382-13392.	7.2	234

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37	Out-of-equilibrium microcompartments for the bottom-up integration of metabolic functions. <i>Nature Communications</i> , 2018, 9, 2391.	5.8	55
38	Concentration-alternating frequency response: A new method for studying polymer electrolyte membrane fuel cell dynamics. <i>Electrochimica Acta</i> , 2017, 243, 53-64.	2.6	22
39	Catalyst Layer Modeling. , 2017, , 259-285.		1
40	Toward Artificial Mitochondrion: Mimicking Oxidative Phosphorylation in Polymer and Hybrid Membranes. <i>Nano Letters</i> , 2017, 17, 6816-6821.	4.5	96
41	Electron Transfer Between Enzymes and Electrodes. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2017, 167, 39-85.	0.6	2
42	Energy Conversion Based on Bio(electro)catalysts. , 2017, , 757-777.		2
43	Material development and process optimization for gas-phase hydrogen chloride electrolysis with oxygen depolarized cathode. <i>Journal of Applied Electrochemistry</i> , 2016, 46, 755-767.	1.5	7
44	Autonomous Voltage Oscillations in a Direct Methanol Fuel Cell. <i>Electrochimica Acta</i> , 2016, 212, 545-552.	2.6	20
45	Gluconic Acid Synthesis in an Electroenzymatic Reactor. <i>Electrochimica Acta</i> , 2015, 174, 480-487.	2.6	17
46	Dynamic and steady state 1-D model of mediated electron transfer in a porous enzymatic electrode. <i>Bioelectrochemistry</i> , 2015, 106, 3-13.	2.4	15
47	Elektroenzymatischer Reaktor für selektive Oxidation. <i>Chemie-Ingenieur-Technik</i> , 2014, 86, 1445-1445.	0.4	0
48	Combined electrochemical and microscopic study of porous enzymatic electrodes with direct electron transfer mechanism. <i>RSC Advances</i> , 2014, 4, 36471-36479.	1.7	9
49	Mathematical Modeling of a Porous Enzymatic Electrode with Direct Electron Transfer Mechanism. <i>Electrochimica Acta</i> , 2014, 137, 616-626.	2.6	27
50	Analysis of a novel chlorine recycling process based on anhydrous HCl oxidation. <i>Electrochimica Acta</i> , 2014, 123, 387-394.	2.6	10
51	Alternating electron transfer mechanism in the case of high-performance tetrathiafulvalene-tetracyanoquinodimethane enzymatic electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2013, 690, 68-73.	1.9	16
52	Energy-efficient chlorine production by gas-phase HCl electrolysis with oxygen depolarized cathode. <i>Electrochemistry Communications</i> , 2013, 34, 320-322.	2.3	29
53	Application of electrochemical impedance spectroscopy for studying of enzyme kinetics. <i>Electrochimica Acta</i> , 2013, 110, 94-104.	2.6	18
54	Electrochemical Membrane Reactors for Sustainable Chlorine Recycling. <i>Membranes</i> , 2012, 2, 510-528.	1.4	22

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55	Direct hybrid glucose-oxygen enzymatic fuel cell based on tetrathiafulvalene-tetracyanoquinodimethane charge transfer complex as anodic mediator. Journal of Power Sources, 2011, 196, 9260-9269.	4.0	25
56	Impact of the Gold Support on the Electrocatalytic Oxidation of Sugars at Enzyme-Modified Electrodes. Electroanalysis, 2011, 23, 927-930.	1.5	13
57	Recent Advances in Enzymatic Fuel Cells: Experiments and Modeling. Energies, 2010, 3, 803-846.	1.6	177